

Hys-28  
SEQUENCE LISTING

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<120> METHODS AND MATERIALS RELATING TO METALLOCARBOXYPEPTIDASE-LIKE POLYPEPTIDES AND POLYNUCLEOTIDES

<130> HYS-28

<140> NOT YET ASSIGNED  
<141> 2000-09-29

<150> US 09/560,875  
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<150> US 09/496,914  
<151> 2000-02-03

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<170> PatentIn version 3.0

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Met Lys Pro Leu Leu Glu Thr	
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Leu Tyr Leu Leu Gly Met Leu Val Pro Gly Gly Leu Gly Tyr Asp Arg	
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Ser Leu Ala Gln His Arg Gln Glu Ile Val Asp Lys Ser Val Ser Pro	
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Trp Ser Leu Glu Thr Tyr Ser Tyr Asn Ile Tyr His Pro Met Gly Glu	
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Ile Tyr Glu Trp Met Arg Glu Ile Ser Glu Lys Tyr Lys Glu Val Val	
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Thr Gln His Phe Leu Gly Val Thr Tyr Glu Thr His Pro Ile Tyr Tyr	
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Leu Lys Ile Ser Gln Pro Ser Gly Asn Pro Lys Lys Ile Ile Trp Met	
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Asp Cys Gly Ile His Ala Arg Glu Trp Ile Ala Pro Ala Phe Cys Gln	
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Trp Phe Val Lys Glu Ile Leu Gln Asn His Lys Asp Asn Ser Arg Ile	
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Arg Lys Leu Leu Arg Asn Leu Asp Phe Tyr Val Leu Pro Val Leu Asn	
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Ile Asp Gly Tyr Ile Tyr Thr Trp Thr Thr Asp Arg Leu Trp Arg Lys	
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tcc cgt tca ccc cat aat aat ggc aca tgt ttt ggg acg gat ctc aat	642
Ser Arg Ser Pro His Asn Asn Gly Thr Cys Phe Gly Thr Asp Leu Asn	
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Gly Gly Leu Gly Tyr Asp Arg Ser Leu Ala Gln His Arg Gln Glu Ile  
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Val Asp Lys Ser Val Ser Pro Trp Ser Leu Glu Thr Tyr Ser Tyr Asn  
35 40 45

Ile Tyr His Pro Met Gly Glu Ile Tyr Glu Trp Met Arg Glu Ile Ser  
50 55 60

Glu Lys Tyr Lys Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr  
65 70 75 80

Glu Thr His Pro Ile Tyr Tyr Leu Lys Ile Ser Gln Pro Ser Gly Asn  
85 90 95

Pro Lys Lys Ile Ile Trp Met Asp Cys Gly Ile His Ala Arg Glu Trp  
100 105 110

Ile Ala Pro Ala Phe Cys Gln Trp Phe Val Lys Glu Ile Leu Gln Asn  
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His Lys Asp Asn Ser Arg Ile Arg Lys Leu Leu Arg Asn Leu Asp Phe  
130 135 140

Tyr Val Leu Pro Val Leu Asn Ile Asp Gly Tyr Ile Tyr Thr Trp Thr  
145 150 155 160

Thr Asp Arg Leu Trp Arg Lys Ser Arg Ser Pro His Asn Asn Gly Thr  
165 170 175

Cys Phe Gly Thr Asp Leu Asn Arg Asn Phe Asn Ala Ser Trp Cys Ser  
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Ile Gly Ala Ser Arg Asn Cys Gln Asp Gln Thr Phe Cys Gly Thr Gly  
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Pro Val Ser Glu Pro Glu Thr Lys Ala Val Ala Ser Phe Ile Glu Ser  
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Lys Lys Asp Asp Ile Leu Cys Phe Leu Thr Met His Ser Tyr Gly Gln  
225 230 235 240

Leu Ile Leu Thr Pro Tyr Gly Tyr Thr Lys Asn Lys Ser Ser Asn His  
245 250 255

Pro Glu Met Ile Gln Val Gly Gln Lys Ala Ala Asn Ala Leu Lys Ala  
260 265 270

Lys Tyr Gly Thr Asn Tyr Arg Val Gly Ser Ser Ala Asp Ile Leu Tyr  
275 280 285

Ala Ser Ser Gly Ser Ser Arg Asp Trp Ala Arg Asp Ile Gly Ile Pro  
290 295 300

Phe Ser Tyr Thr Phe Glu Leu Arg Asp Ser Gly Thr Tyr Gly Phe Val  
Page 4

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305                  310                  315                  320

Leu Pro Glu Ala Gln Ile Gln Pro Thr Cys Glu Glu Thr Met Glu Ala  
325                  330                  335

Val Leu Ser Val Leu Asp Asp Val Tyr Ala Lys His Trp His Ser Asp  
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Ser Ala Gly Arg Val Thr Ser Ala Thr Met Leu Leu Gly Leu Leu Val  
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Ser Cys Met Ser Leu Leu  
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Tyr Val Leu Pro Val Leu Asn Ile Asp Gly Tyr Ile Tyr Thr Trp Thr  
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Thr Asp Arg Leu Trp Arg Lys Ser Arg  
35 40

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Lys Ile Ile Trp Met Asp Cys Gly Ile His Ala Arg Glu Trp Ile  
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Lys Tyr Lys Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr Glu  
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Thr His Pro Ile Tyr Tyr Leu Lys Ile  
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Hys-28

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Thr Lys Ala Val Ala Ser Phe Ile Glu Ser Lys  
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Gly Thr Asp Leu Asn Arg Asn Phe Asn  
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Gly Gly Leu Gly  
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Met Gly Glu Ile Tyr Glu Trp Met Arg Glu Ile Ser Glu Lys Tyr Lys  
 35 40 45

Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr Glu Thr His Pro  
 50 55 60

Ile Tyr Tyr Leu Lys Ile Ser Gln Pro Ser Gly Asn Pro Lys Lys Ile  
 65 70 75 80

Ile Trp Met Asp Cys Gly Ile His Ala Arg Glu Trp Ile Ala Pro Ala  
 85 90 95

Phe Cys Gln Trp Phe Val Lys Glu Ile Leu Gln Asn His Lys Asp Asn  
 100 105 110

Ser Arg Ile Arg Lys Leu Leu Arg Asn Leu Asp Phe Tyr Val Leu Pro  
 115 120 125

Val Leu Asn Ile Asp Gly Tyr Ile Tyr Thr Trp Thr Asp Arg Leu  
 130 135 140

Trp Arg Lys Ser Arg Ser Pro His Asn Asn Gly Thr Cys Phe Gly Thr  
 145 150 155 160

Asp Leu Asn Arg Asn Phe Asn Ala Ser Trp Cys Ser Ile Gly Ala Ser  
 165 170 175

Arg Asn Cys Gln Asp Gln Thr Phe Cys Gly Thr Gly Pro Val Ser Glu  
 180 185 190

Pro Glu Thr Lys Ala Val Ala Ser Phe Ile Glu Ser Lys Lys Asp Asp  
 195 200 205

Ile Leu Cys Phe Leu Thr Met His Ser Tyr Gly Gln Leu Ile Leu Thr  
 210 215 220

Pro Tyr Gly Tyr Thr Lys Asn Lys Ser Ser Asn His Pro Glu Met Ile  
 225 230 235 240

Gln Val Gly Gln Lys Ala Ala Asn Ala Leu Lys Ala Lys Tyr Gly Thr  
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Asn Tyr Arg Val Gly Ser Ser Ala Asp Ile Leu Tyr Ala Ser Ser Gly  
 260 265 270

Ser Ser Arg Asp Trp Ala Arg Asp Ile Gly Ile Pro Phe Ser Tyr Thr  
 275 280 285

Phe Glu Leu Arg Asp Ser Gly Thr Tyr Gly Phe Val Leu Pro Glu Ala  
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Gln Ile Gln Pro Thr Cys Glu Glu Thr Met Glu Ala Val Leu Ser Val  
 305 310 315 320

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Val Thr Ser Ala Thr Met Leu Leu Gly Leu Leu Val Ser Cys Met Ser  
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Leu Leu

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		20			25					30					
Lys	Ile	Ile	Trp	Met	Asp	Cys	Gly	Ile	His	Ala	Arg	Glu	Trp	Ile	Ala
		35			40					45					
Pro	Ala	Phe	Cys	Gln	Trp	Phe	Val	Lys	Glu	Ile	Leu	Gln	Asn	His	Lys
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Asp	Asn	Ser	Arg	Ile	Arg	Lys	Leu	Leu	Met	Asn	Leu	Asp	Phe	Tyr	Val
		65			70			75		80					
Leu	Pro	Val	Leu	Asn	Ile	Asp	Gly	Tyr	Ile	Tyr	Thr	Trp	Thr	Thr	Asp
		85				90					95				
Arg	Leu	Trp	Arg	Lys	Ser	Arg	Ser	Pro	His	Asn	Asn	Gly	Thr	Cys	Phe
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Gly	Thr	Asp	Leu	Asn	Arg	Asn	Phe	Asn	Ala	Ser	Trp	Cys	Ser	Ile	Gly
		115			120					125					
Ala	Ser	Arg	Asn	Cys	Gln	Asp	Gln	Thr	Phe	Cys	Gly	Thr	Gly	Pro	Val
		130			135			140							
Ser	Glu	Pro	Glu	Thr	Lys	Ala	Val	Ala	Ser	Phe	Ile	Glu	Ser	Lys	Asn
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Asp	Asp	Phe	Cys	Ala											
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&lt;211&gt; 324

&lt;212&gt; PRT

&lt;213&gt; bothrops jararaca

&lt;400&gt; 20

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Gln	Ala	Val	Leu	Asp	Arg	Gln	Leu	Asp	Asn	His	Ala	Arg	Thr	Ala	Gly
		20			25					30					
Tyr	Asn	Tyr	Glu	Lys	Tyr	Asn	Ser	Trp	Glu	Lys	Ile	Asp	Ala	Trp	Thr
		35			40					45					
Ala	Asp	Ile	Ala	Asn	Glu	Asn	Pro	Ser	Leu	Val	Ser	Arg	Leu	Gln	Ile
		50			55					60					
Gly	Thr	Thr	Phe	Glu	Gly	Arg	Pro	Met	Pro	Leu	Leu	Lys	Val	Gly	Lys
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Pro	Gly	Val	Asn	Lys	Lys	Ala	Ile	Phe	Ile	Asp	Cys	Gly	Phe	His	Ala
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Arg	Glu	Trp	Ile	Ser	Pro	Ala	Phe	Cys	Gln	Trp	Phe	Val	Arg	Glu	Ala

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115 120	125	
Leu Asp Phe Tyr Ile Leu Pro Val	Leu Asn Ile Asp Gly	Tyr Val Tyr
130 135	140	
Ser Trp Lys Gln Ser Arg Met	Trp Arg Lys Thr Arg Ser	Val Asn Ala
145 150	155	160
Gly Ser Thr Cys Ile Gly Thr Asp	Pro Asn Arg Asn Phe	Asp Ala Ala
165 170	175	
Trp Cys Ser Val Gly Ala Ser	Arg Asn Pro Cys Ser	Glu Thr Tyr Cys
180 185	190	
Gly Ser Lys Pro Glu Ser Glu	Lys Glu Thr Lys Ala	Leu Ala Asp Phe
195 200	205	
Ile Arg Arg Asn Arg Ser	Ile Ile Gln Ala Tyr	Leu Thr Ile His Ser
210 215	220	
Tyr Ser Gln Met Leu Leu	Tyr Pro Tyr Ser Tyr	Thr Tyr Asp Leu Thr
225 230	235	240
Ser Asn Asn Lys Lys Leu Asn	Ser Ile Ala Lys Glu	Ala Ile Arg Glu
245 250	255	
Leu Lys Val Leu Phe Gly	Thr Glu Tyr Thr Tyr	Gly Pro Gly Ala Ala
260 265	270	
Thr Ile Tyr Pro Ala Ala	Gly Ser Asp Asp Trp	Ala Tyr Asp Gln
275 280	285	
Gly Ile Lys Tyr Ala Phe	Thr Phe Glu Leu Arg	Asp Lys Gly Arg Tyr
290 295	300	
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Gly Thr Thr Phe Glu Gly Arg	Ala Ile Tyr Leu Leu	Lys Val Gly Lys
35 40	45	
Ala Gly Gln Asn Lys Pro	Ala Ile Phe Met Asp	Cys Gly Phe His Ala
50 55	60	
Arg Glu Trp Ile Ser Pro	Ala Phe Cys Gln Trp	Phe Val Arg Glu Ala
65 70	75	80
Val Arg Thr Tyr Gly Arg Glu	Ile Gln Val Thr Glu	Leu Leu Asp Lys
85 90	95	
Leu Asp Phe Tyr Val	Leu Pro Val	Leu Asn Ile Asp Gly
		Tyr Ile Tyr

## Hys-28

100

105

110

Thr Trp Thr Lys Ser Arg Phe Trp Arg Lys Thr Arg Ser Thr His Thr  
 115 120 125

Gly Ser Ser Cys Ile Gly Thr Asp Pro Asn Arg Asn Phe Asp Ala Gly  
 130 135 140

Trp Cys Glu Ile Gly Ala Ser Arg Asn Pro Cys Asp Glu Thr Tyr Cys  
 145 150 155 160

Gly Pro Ala Ala Glu Ser Glu Lys Glu Thr Lys Ala Leu Ala Asp Phe  
 165 170 175

Ile Arg Asn Lys Leu Ser Ser Ile Lys Ala Tyr Leu Thr Ile His Ser  
 180 185 190

Tyr Ser Gln Met Met Ile Tyr Pro Tyr Ser Tyr Ala Tyr Lys Leu Gly  
 195 200 205

Glu Asn Asn Ala Glu Leu Asn Ala Leu Ala Lys Ala Thr Val Lys Glu  
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Leu Ala Ser Leu His Gly Thr Lys Tyr Thr Tyr Gly Pro Gly Ala Thr  
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Thr Ile Tyr Pro Ala Ala Gly Asn Ser Arg Asp Trp Ala Tyr Asp Gln  
 245 250 255

Gly Ile Arg Tyr Ser Phe Thr Phe Glu Leu Arg Asp Thr Gly Arg Tyr  
 260 265 270

Gly Phe Leu Leu Pro Glu Ser Gln Ile Arg Ala Thr Cys Glu Glu Thr  
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His His His His His Glu  
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